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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,327	01/14/2002	Durga P. Satapathy	1441	9579
21396	7590	05/19/2005	EXAMINER	
Sprint 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			LIN, WEN TAI	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/047,327

Applicant(s)

SATAPATHY ET AL.

Examiner

Wen-Tai Lin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/21/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. Claims 1-75 are presented for examination.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-14, 26, 37-38, 41, 43-44, 46-61 and 75 are rejected under the second paragraph of 35 U.S.C. 112 because the following terms lack antecedent basis:

In claim 12, "the signal processing";

In claim 26, "the physical interfaces";

In claim 37, "the controller";

In claim 38, "the access technology";

In claim 41, "the controller";

In claim 43, "the received communication";

In claim 44, "the controller";

In claim 44, "the received communication";

In claim 46, "the signal formatting";

In claim 46, "the received communication";

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In claim 47, "the controller";

In claim 47, "the received communication";

In claims 48 and 50-53, "the communication";

In claims 56-60, "the frame formatting"; and

In claim 75, "the signal processor".

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-47 are rejected under 35 U.S.C. 102(e) as being anticipated by McHale et al.[U.S. 6385203].

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5. As to claims 1 and 5-6, McHale teaches the invention as claimed including: a system for accessing a plurality of access technologies [Abstract; Fig.1] comprising:

a transceiver configured to communicate via a network protocol [108, Fig.3];

a premises device configured to communicate via a premises protocol [e.g., 12, Fig.1]; and

an access device configured to communicate with the transceiver and the premises device using the plurality of access technologies to receive a communication, to dynamically determine an access technology type for the communication from among the plurality of access technologies, to reformat the communication for another access technology type, and to transmit the communication [Fig.2; col.8, lines 33-65].

6. As to claim 2, McHale further teaches that the access device comprises:

a network interface configured to communicate via the network protocol with the transceiver [e.g. 60, Fig.1];

a service hub configured to communicate via the premises protocol with the premises device [e.g., 50, Fig.1]; and

a central core configured to dynamically determine the access technology type and to reformat the communication [e.g., 58, Fig.1].

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7. As to claim 3, McHale further teaches that the access device is configured to support voice service and data service [e.g., 20, 22, Fig.1].

8. As to claim 4, McHale further teaches that the access device is configured to dynamically map voice service to a first access technology [e.g., voice via the traditional telephone network] and to dynamically map data service to a second access technology [e.g., data via the XDSL for packet data network].

9. As to claims 7 and 9, McHale further teaches that the access device is configured to communicate with the transceiver using at least one member of a group comprising a wireline access technology and a wireless access technology [56, Fig.1; col.6, lines 1-14].

10. As to claims 8, 10 and 16, McHale further teaches that the access device is configured to communicate with the transceiver using at least one member of a group comprising asynchronous digital subscriber line, single line digital subscriber line, high bit-rate digital subscriber line, very high data rate digital subscriber line, cable television, multipoint multichannel distribution service, local multipoint distribution system, personal communications service, a satellite link, internet protocol, and asynchronous transfer mode [col.2, lines 26-46].

11. As to claim 11, McHale further teaches that the access device is configured to format the communication according to at least one member of a

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group comprising a signal format, a frame format, an access standard, an access protocol, and a medium access control emulation [col.6, lines 36-42].

12. As to claim 12, McHale further teaches that the signal processing comprises at least one member of a group comprising coding, decoding, modulation, demodulation, filtering, and applying multimedia processing [col.7, lines 10-24].

13. As to claim 13, McHale further teaches that the modulation comprises at least one member of a group comprising quadrature amplitude modulation, quaternary phase shift keying, orthogonal frequency division multiplexing, and carrierless amplitude and phase modulation [col.7, lines 10-24].

14. As to claim 14, McHale further teaches that the demodulation comprises at least one member of a group comprising quadrature amplitude modulation, quaternary phase shift keying, orthogonal frequency division multiplexing, and carrierless amplitude and phase modulation [Fig.5; col.13, lines 40-50].

15. As to claim 15, McHale further teaches that the frame format comprises at least one member of a group comprising an internet protocol format, an asynchronous transfer mode format, a high level data link control format, an ethernet format, a synchronous optical network format, and at least one digital signal level format [e.g., col.6, lines 36-42].

16. As to claim 17, McHale further teaches that the access standard comprises at least one member of a group comprising IEEE 802.11a, IEEE 802.11b, IEEE 802.16, IEEE 802.16a, IEEE 802.16b, IEEE 802.3, ETSI HIPERMAN, Bluetooth, simple workflow access protocol, home phone line networking alliance, and data over cable service interface specifications [col.6, lines 36-42; note that Ethernet uses IEEE 802.3 standard].

17. As to claim 18, McHale teaches the invention as claimed including: a system for accessing a plurality of access technologies [col.1, line 53 – col.2, line 61] comprising:

- a network interface configured for network access [e.g. 60, Fig.1];
- a service hub configured for premises device access [e.g., 50, Fig.1]; and
- a central core [e.g., 58, Fig.1] configured to communicate using a plurality of access technologies, to process a communication for a first one of the access technologies, to select a port from the network interface or the service hub, and to generate the communication for transmission from the port [col.23, lines 22-35].

18. As to claim 19, McHale teaches that the network interface is configured with at least one member of a group comprising a wireless port and a wireline port [56, Fig.1; col.6, lines 1-14].



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19. As to claim 20, McHale further teaches that the network interface further is configured to receive the communication via the network access, and the network interface comprises a dynamic identifier configured to dynamically identify an access technology type of the communication [Figs. 17; col.27, lines 41-43; e.g., packet headers serve as identifiers for their respective access technology type].

20. As to claims 25-26, McHale further teaches that the service hub comprises a premises interface comprising a plurality of physical interfaces, each physical interface configured for communication for a different one of the access technologies [Figs. 15-16, wherein xDSL ports are shown to be configured physical interfaces].

21. As to claim 28, McHale further teaches that the central core is configured to format the communication for the first access technology, to transmit the communication to the service hub, and to transmit a control signal to the service hub identifying the first access technology [e.g., 84, 86, Fig.2]; and

the service hub is configured to receive the communication and the control signal and to direct the communication to the port corresponding to the first access technology [e.g., Figs. 15-16].

22. As to claim 30, McHale further teaches that the service hub is configured to receive the communication, to identify the communication as having the first

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access technology, to transmit the communication to the central core, and to transmit a control signal to the central core identifying the first access technology; and the central core is configured to receive the communication and the control signal and to format the communication from the first access technology to a second one of the access technologies [e.g., the first access technology being one of the xDSL technology and the second technology could be one of the Etehrnet, ATM or HDLC; see col.6, lines 26-42].

23. As to claim 34, McHale further teaches that the central core comprises a specifications database configured to 20] for the plurality of access technologies [e.g., 120, Fig.3; col.10, lines 4 – 61].

24. As to claim 35, McHale further teaches that the specifications database is configured to receive a control signal requesting a specification for a selected access technology and, in response, to transmit the specification in another control message [col.10, lines 43-61; col.11, lines 16-33].

25. As to claim 36, McHale further teaches that the central core comprises a controller configured to control formatting for the communication [e.g., 612, Fig.12; col. 20, lines 12-23].

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26. As to claims 21-24, 27, 29 and 31, since the features of these claims can also be found in claims 1-2, 18-20, 28 and 30, they are rejected for the same reasons set forth in the rejection of claims 1-2, 18-20, 28 and 30 above.

27. As to claim 37, McHale further teaches that the controller is configured to receive a control signal from at least one member of a group comprising the service hub and the network interface, the control signal identifying the access technology, and to control removing formatting from the communication according to the access technology [e.g., 612, Fig.12; col. 20, lines 12-23].

28. As to claims 39-41, McHale further teaches that the central core comprises an access protocol formatter [e.g., 121, Fig.3] configured to format the communication for an access protocol, wherein the access protocol formatter is configured to remove access protocol formatting for a selected access protocol from a received communication and to format an outgoing communication with other access protocol formatting for another selected access protocol, and wherein the access protocol formatter further is configured to transmit a control signal to the controller identifying the selected access protocol of the received communication [e.g., col.9, lines 18-30; note that the protocol formatter may function as a frame formatter or a signal formatter depending on the protocol on the digital lines – see col.9, lines 18-30].

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**29.** As to claims 32-33, 38 and 42-75, since the features of these claims can also be found in claims 1-31, 36 and 39-41, they are rejected for the same reasons set forth in the rejection of claims 1-31, 36 and 39-41 above.

**30.** A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

### ***Conclusion***

**Examiner note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


(703)872-9306 for official communications; and

(571)273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

May 4, 2005



5/4/05

IDS of 10/047327

IDF-1505, filed 22 Dec. 2000, assigned U.S. Patent App. Serial No. 09/747,907, and entitled "Integrated Services Hub Self Configuration."

IDF-1504 filed 30 Nov. 2000, assigned U.S. Patent App. Serial No. 09/727,201, and entitled "Method and Apparatus for Minimizing the Telephony Ring Voltage Power Supply Requirements of an Integrated Services Hub."

IDF-1503 filed 29 Dec. 2000, assigned U.S. Patent App. Serial No. 09/751,778, and entitled "Combination Router Bridge in an Integrated Services Hub."

IDF-1502 filed 12 Oct. 2000, assigned U.S. Patent App. Serial No. 09/687,683, and entitled "Method and Apparatus for Synchronizing the Coding and Decoding of Information in an Integrated Services Hub."

IDF-1499 filed 31 Oct. 2000, assigned U.S. Patent App. Serial No. 09/702,933, and entitled "Method and Apparatus for Determining and Reporting the Operational Status of an Integrated Services Hub."

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